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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,030	03/05/2002	Rogelio Areal Guerra	A34839-PCT-USA	8212

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EXAMINER	
MCKANE, ELIZABETH L	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/980,030	GUERRA, ROGELIO AREAL	
	Examiner	Art Unit	
	Leigh McKane	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 63-125* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *124 and 125* is/are allowed.

6)☒ Claim(s) *1,63-65,67,68,70-81,85-94,96,97,99-107,110,111 and 117-121* is/are rejected.

7)☒ Claim(s) *66,69,82-84,95,98,108,109,112-116,122 and 123* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *030702*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Double Patenting

1. Applicant is advised that should claim 1 be found allowable, claim 63 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 87 is rejected under 35 U.S.C. 102(b) as being anticipated by Eggersdorfer et al (U.S. 5,120,500).

Eggersdorfer et al teaches a method of deacidifying paper wherein the paper is initially at atmospheric pressure, placed into a chamber which is placed under a vacuum, and a deacidifying agent and carrier conveyed into the autoclave to impregnate the paper. See col.4, line 66 to col.5, line 18.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 63-65, 67, 68, 70-72, 74-81, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al (U.S. 5,213,619) in view of Schmoegner (5,122,344).

Jackson et al teaches a device for impregnation of articles. The device includes an autoclave **50** with pressure and temperature control, a solvent bottle **44** connected to the autoclave, and a dosification tank **48** for concentrated reagent. Jackson et al does not teach a loading cell for the solvent bottle, but does disclose a mixing chamber **112** for accurately mixing the solvent with the reagent. See col.13, lines 52-66. It is deemed obvious to employ other suitable metering means in order to achieve the desired reagent concentration in the solvent. Moreover, Jackson et al is silent with respect to a gravity collection tank. However, Schmoegner evidences that this is known in the art of chemical treatment. Gravity collection tank **36** receives condensed sterilant from autoclave **10** through a valve **32** and refrigerated condenser coils **29**. As a condenser and collection chamber are convenient means by which to handle large amounts of solvent and to control the discharge thereof, it would have been an obvious modification to the apparatus of Jackson et al.

Jackson et al teaches the use of either cooling coils or ceramic heating bands to provide a mixing chamber temperature most suitable for dissolving the desired faction of reagent into the solvent. See col. 14, lines 17-25. For this reason, it is deemed obvious to heat or cool the solvent container as well.

Jackson et al further discloses that the entire device should be integrated with a computer system using an analog-digital controller and computer control software and housed and operated in an environmental control enclosure. See col.12, lines 48-65. It is known in the art to operate devices and processes within an environmental control enclosure using a robot and the use of such would have been obvious to one of ordinary skill in the art.

7. Claims 73, 85, and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al and Schmoegner as applied to claim 63 above, and further in view of Childers (U.S. 5,173,258).

The combination of Jackson et al with Schmoegner fails to teach a loading cell. However, such is known in the art to chemical treatment (see Childers, Figures 1 and 2, "Electronic Balance" holding bottles **60,62**). As Jackson et al teaches computer control of valves, sensors, pumps, and mixers (col.12, lines 48-53), it is deemed obvious to one of ordinary skill in the art to employ the loading cell of Childers as a means by which to automatically control mixing of the reagent and solvent.

8. Claims 88, 89, 91-94, 97, 99-101, 103, 104-107, 110, 111, 117, 120, and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggersdorfer et al.

With respect to the number of oscillating pressure cycles, it is deemed obvious to optimize this number for optimal impregnation of the paper and water removal.

Eggersdorfer et al discloses a vacuum of 50 mbars ("about 40 millibars"). See col.6, line 6. The maximum temperature within the chamber is 60 °C (col.5, line 2). Regardless, as both pressure and temperature are result effective variables, it would have been obvious to one in the art to optimize the variables as being readily determinable by routine experimentation.

Similarly, variables such as treatment time, reagent concentration, and the size of the load are result effective and readily determined and optimized by routine experimentation.

9. Claims 102, 118, and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggersdorfer et al as applied to claims 100 and 105 above, and further in view of Jackson et al.

Eggersdorfer et al is silent with respect to preheating the carrier prior to mixing. Jackson et al teaches the use of either cooling coils or ceramic heating bands to provide a mixing chamber temperature most suitable for dissolving the desired faction of reagent into the solvent. See col. 14, lines 17-25. For this reason, it is deemed obvious to heat or cool the solvent container as well.

Eggersdorfer et al does not teach an automated system. Jackson et al, however, discloses that the entire device should be integrated with a computer system using an analog-digital controller and computer control software and housed and operated in an environmental control enclosure. See col.12, lines 48-65. As automating the system removes the possibility of human error and contamination, it would have been an obvious modification to the invention of Eggersdorfer et al.

Allowable Subject Matter

10. Claims 66, 69, 82-84, 95, 98, 108, 109, 112-116, 122, and 123 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 124 and 125 are allowed.

Drawings

12. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings need to be amended in English. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Wednesday (6:30 am-4:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leigh McKane

Leigh McKane
Primary Examiner
Art Unit 1744

elm
27 June 2005